

=> s bubble? and hydraulic motor and water

91590 BUBBLE?  
172450 HYDRAULIC  
416210 MOTOR  
17358 HYDRAULIC MOTOR  
(HYDRAULIC(W)MOTOR)  
733859 WATER

L1 155 BUBBLE? AND HYDRAULIC MOTOR AND WATER

=> d 11 155

155. 3,604,139, Sep. 14, 1971, APPARATUS FOR SEINE PURSING AND METHOD FOR PURSING A SEINE THEREBY; Paul Strom, et al., 43/4.5, 8, 14 [IMAGE AVAILABLE]

=> d 11 1-155

1. 5,853,068, Dec. 29, 1998, Apparatus for exchange of automotive fluids; Patrick Lewis Dixon, et al., 184/1.5; 134/169A; 141/95, 98, 231, 331; 184/6.28, 6.4, 96, 104.3, 108 [IMAGE AVAILABLE]
2. 5,851,068, Dec. 22, 1998, Intermodal transportation of sedimentary substances; Robert M. Rumph, 366/348 [IMAGE AVAILABLE]
3. 5,832,969, Nov. 10, 1998, Fluid powered **bubble** machine with spill-proof capability; Michael R. Schramm, 141/98, 311A, 339; 446/20 [IMAGE AVAILABLE]
4. 5,803,665, Sep. 8, 1998, Method and apparatus for continuous production of quick-setting foamed cement grout with selectively adjustable proportions; Patrick J. Stephens, 405/146; 138/98; 405/132, 150.1, 154 [IMAGE AVAILABLE]
5. 5,803,596, Sep. 8, 1998, Method and apparatus for high capacity production of finished aqueous foam with continuously adjustable proportioning; Patrick J. Stephens, 366/10; 169/15; 261/27, DIG.26; 366/16, 51, 160.3 [IMAGE AVAILABLE]
6. 5,799,740, Sep. 1, 1998, Directional boring head with blade assembly; Brent G. Stephenson, et al., 175/62, 376 [IMAGE AVAILABLE]
7. 5,795,060, Aug. 18, 1998, Method and apparatus for continuous production of colloiddally-mixed cement slurries and foamed cement grouts; Patrick J. Stephens, 366/2, 8, 10, 16, 20, 40, 51 [IMAGE AVAILABLE]
8. 5,794,734, Aug. 18, 1998, Method and apparatus for supplying driving energy to vehicle subassemblies; Ernst-Leo Fahl, et al., 180/165; 60/418; 180/53.8 [IMAGE AVAILABLE]
9. 5,775,103, Jul. 7, 1998, Apparatus for purifying a fluid by vacuum treatment; Hakan Ingvast, 60/453, 454, 488 [IMAGE AVAILABLE]
10. 5,766,313, Jun. 16, 1998, Hydrocarbon recovery system; Rodney T. Heath, 95/161, 163, 166, 169, 179, 227, 231; 96/182, 218, 242 [IMAGE AVAILABLE]

11. 5,720,834, Feb. 24, 1998, Method for covering a pipeline by wrapping; Robert Edward Steele, et al., 156/86, 162, 187, 272.2 [IMAGE AVAILABLE]
12. 5,720,438, Feb. 24, 1998, Mobile apparatus and process for treating infectious waste; Thomas J. Devine, et al., 241/21, 29, 606; 422/27 [IMAGE AVAILABLE]
13. 5,713,726, Feb. 3, 1998, Pump apparatus; Hideki Nakayoshi, 417/310, 292, 440; 418/161 [IMAGE AVAILABLE]
14. 5,709,536, Jan. 20, 1998, Hydro mechanical packingless pump and liquid spray system; Wesley E. Renfro, et al., 417/383; 137/454.4, 512; 417/362, 472 [IMAGE AVAILABLE]
15. 5,653,189, Aug. 5, 1997, Hydrofoil craft; Peter R. Payne, 114/274 [IMAGE AVAILABLE]
16. 5,651,316, Jul. 29, 1997, Retractable printing/coating unit operable on the plate and blanket cylinders simultaneously from the dampener side of the first printing unit or any consecutive printing unit of any rotary offset printing press; Howard W. DeMoore, et al., 101/450.1, 424.1; 118/46 [IMAGE AVAILABLE]
17. 5,632,195, May 27, 1997, Food processing apparatus with non-straight lifting and agitating baffles; David R. Zittel, 99/348, 404, 409, 443C, 516; 134/65, 132; 366/81, 234, 319 [IMAGE AVAILABLE]
18. 5,626,423, May 6, 1997, Apparatus and method for transporting and agitating a substance; Robert M. Rumph, 366/270, 191, 297 [IMAGE AVAILABLE]
19. 5,603,608, Feb. 18, 1997, Methods and apparatus for monitoring progressive cavity pumps; Horst F. Marz, 417/13; 277/320, 602, 907; 417/32; 418/48 [IMAGE AVAILABLE]
20. 5,598,777, Feb. 4, 1997, Retractable printing/coating unit operable on the plate and blanket cylinders; Howard W. DeMoore, et al., 101/177, 352.04 [IMAGE AVAILABLE]
21. 5,558,604, Sep. 24, 1996, Aquatic treadmill apparatus; Thomas H. Hopkins, 482/54, 111 [IMAGE AVAILABLE]
22. 5,466,385, Nov. 14, 1995, Gas sparged contrifugation method; Ernest E. Rogers, et al., 210/787; 55/459.1, 459.4; 210/221.2, 360.1, 380.1, 512.3; 494/43, 50 [IMAGE AVAILABLE]
23. 5,451,284, Sep. 19, 1995, Self-mobile work vehicle moveable through pipeline and method and apparatus for lining interconnecting branch pipe using the vehicle; Shintaro Ikeda, et al., 156/247; 138/97; 156/287, 294, 344, 423, 584; 405/154 [IMAGE AVAILABLE]
24. 5,425,617, Jun. 20, 1995, Constant static pressure runner in an axial flow turbine; Antonio A. Teran, 415/71, 72; 416/176 [IMAGE AVAILABLE]
25. 5,419,632, May 30, 1995, Method and apparatus for continuous mixing and injection of foamed cement grout; Patrick J. Stephens, 366/3, 51; 405/150.1, 267 [IMAGE AVAILABLE]
26. 5,392,868, Feb. 28, 1995, Directional multi-blade boring head; Arthur D. Deken, et al., 175/62, 376 [IMAGE AVAILABLE]
27. 5,387,342, Feb. 7, 1995, Centrifugal separator and method; Ernest E.

Rogers, et al., 210/512.3, 360.1, 380.1, 512.1, 787; 494/43, 50, 60  
[IMAGE AVAILABLE]

28. 5,387,089, Feb. 7, 1995, Method and apparatus for compressing gases with a liquid system; John Stogner, et al., 417/54; 91/508; 417/339  
[IMAGE AVAILABLE]

29. 5,375,669, Dec. 27, 1994, Method and apparatus for cleaning a borehole; Martin D. Cherrington, 175/53, 62, 69, 102, 215, 324 [IMAGE AVAILABLE]

30. 5,341,887, Aug. 30, 1994, Directional multi-blade boring head; Arthur D. Deken, et al., 175/62, 376 [IMAGE AVAILABLE]

31. 5,328,250, Jul. 12, 1994, Self-propelled undersea nodule mining system; Ronald Upright, 299/8; 37/314; 299/9 [IMAGE AVAILABLE]

32. 5,316,712, May 31, 1994, Process for producing solid cosmetics; Atsushi Ono, et al., 264/102, 211.11, 297.8, 328.16, 328.18, 328.2, 328.8, 330; 425/803, DIG.32 [IMAGE AVAILABLE]

33. 5,262,608, Nov. 16, 1993, Underwater torch cutting and welding apparatus; Reino S. Mustonen, 219/72, 69.1 [IMAGE AVAILABLE]

34. 5,242,026, Sep. 7, 1993, Method of and apparatus for drilling a horizontal controlled borehole in the earth; Arthur D. Deken, et al., 175/62, 19 [IMAGE AVAILABLE]

35. 5,203,359, Apr. 20, 1993, Unitary system for recycling used contaminated material for re-use; Robert H. Fesmire, et al., 134/61, 120, 159, 163 [IMAGE AVAILABLE]

36. 5,169,295, Dec. 8, 1992, Method and apparatus for compressing gases with a liquid system; John Stogner, et al., 417/339; 91/508 [IMAGE AVAILABLE]

37. 5,148,880, Sep. 22, 1992, Apparatus for drilling a horizontal controlled borehole in the earth; Douglas W. Lee, et al., 175/393, 73, 398, 400, 424 [IMAGE AVAILABLE]

38. 5,141,363, Aug. 25, 1992, Mobile train for backfilling tunnel liners with cement grout; Patrick J. Stephens, 405/150.1, 146, 150.2 [IMAGE AVAILABLE]

39. 5,133,882, Jul. 28, 1992, Barge mounted oil recovery and recycle system; Donald M. Stearns, 210/776, 221.1, 242.1, 703, 706, 923 [IMAGE AVAILABLE]

40. 5,132,025, Jul. 21, 1992, Oil well drilling mud and brine recycling system; Ricky A. Hays, 210/758; 166/265; 175/66, 206; 210/615, 705, 787, 804 [IMAGE AVAILABLE]

41. 5,089,120, Feb. 18, 1992, Treatment vessel for bodies of **water** with laterally adjustable pontoons; Thomas E. Eberhardt, 210/170; 114/124, 283; 210/198.1, 242.1; 239/142 [IMAGE AVAILABLE]

42. 5,060,703, Oct. 29, 1991, Apparatus for filling hydraulic systems; Arthur Koerner, 141/59, 65, 98; 188/352 [IMAGE AVAILABLE]

43. 5,048,693, Sep. 17, 1991, Method and apparatus for sorting articles with small density differences utilizing a flotation stream; Arthur Zaltzman, 209/137, 147, 157, 173, 474, 486, 488, 492, 493, 497, 502  
[IMAGE AVAILABLE]

44. 5,042,137, Aug. 27, 1991, Dimpling and riveting method and

- apparatus; Thomas H. Speller, Sr., 29/525.06, 524.1 [IMAGE AVAILABLE]
45. 5,038,523, Aug. 13, 1991, Seawater hydraulic rotary disk tool; Bruce Farber, et al., 451/344; 15/1.7, 29; 451/359 [IMAGE AVAILABLE]
46. 5,035,843, Jul. 30, 1991, Method for producing explosive substances; Herman Schmid, 264/3.2; 149/19.9, 46, 60, 76, 92, 93, 105, 109.6; 264/3.1, 3.4 [IMAGE AVAILABLE]
47. 4,977,966, Dec. 18, 1990, Seawater hydraulic rotary impact tool; Bruce Farber, et al., 173/159; 415/212.1 [IMAGE AVAILABLE]
48. 4,966,077, Oct. 30, 1990, Loading of boreholes with explosive; Pieter S. Halliday, et al., 102/313; 86/20.15; 102/312 [IMAGE AVAILABLE]
49. 4,965,062, Oct. 23, 1990, Hydrogen sulfide removal and sulfide recovery; Christiaan P. Van Dijk, et al., 423/576.7; 23/293S, 313FB; 95/179, 181; 96/218; 422/189; 423/576.4 [IMAGE AVAILABLE]
50. 4,953,638, Sep. 4, 1990, Method of and apparatus for drilling a horizontal controlled borehole in the earth; Richard P. Dunn, 175/61; 33/304; 175/45, 62, 73, 162, 220, 400 [IMAGE AVAILABLE]
51. 4,948,440, Aug. 14, 1990, Emulsion blasting agent preparation system; William E. Cribb, et al., 149/109.6, 2 [IMAGE AVAILABLE]
52. 4,918,766, Apr. 24, 1990, Hydrotherapy exercising device with scissor lift treadmill; Angelo Leonaggeo, Jr., 4/495, 494, 504; 5/611, 928; 119/674, 700; 482/4, 54 [IMAGE AVAILABLE]
53. 4,899,776, Feb. 13, 1990, Method and apparatus for emergency disconnection of a fluid petroleum product transfer arm; Eugene Le Devehat, 137/15; 15/3.51, 104.062; 137/615 [IMAGE AVAILABLE]
54. 4,898,066, Feb. 6, 1990, Polymeric film enveloped explosive cartridges and their manufacture and use; Horst F. Marz, 86/20.1; 102/324 [IMAGE AVAILABLE]
55. 4,885,591, Dec. 5, 1989, Method and apparatus for monitoring ice masses; Ronald D. Page, 342/450, 8, 9, 10, 41 [IMAGE AVAILABLE]
56. 4,885,098, Dec. 5, 1989, Sonic method for facilitating the removal of solid particles from a slurry; Albert G. Bodine, 210/702; 75/371; 210/747, 748; 266/101; 310/81; 366/118, 123, 124, 128, 600; 422/127, 269, 281; 423/1, 20, 27, 34, 50, 55, 65, 71, 85, 92, 101, 122, 140, 155, 184 [IMAGE AVAILABLE]
57. 4,884,985, Dec. 5, 1989, Elastically supported thruster structure; Arnfinn Dyrkorn, 440/52; 60/221; 114/151; 181/207 [IMAGE AVAILABLE]
58. 4,872,408, Oct. 10, 1989, Polymeric film-enveloped explosive cartridges and their manufacture and use; Horst F. Marz, 102/324, 282, 322, 331 [IMAGE AVAILABLE]
59. 4,865,722, Sep. 12, 1989, Method and apparatus for separation using fluidized bed; Max Ririe, et al., 209/474, 486, 492, 493, 498, 502 [IMAGE AVAILABLE]
60. 4,862,568, Sep. 5, 1989, Apparatus to drill and tap a hollow underwater member; Richard N. Wankmuller, et al., 29/26B; 405/211; 408/22, 137 [IMAGE AVAILABLE]
61. 4,858,289, Aug. 22, 1989, Dimpling and riveting apparatus; Thomas H. Speller, Sr., 29/34B, 243.53, 796; 227/61, 69, 99 [IMAGE AVAILABLE]

62. 4,849,237, Jul. 18, 1989, Method for sanitizing poultry carcasses in a poultry processing plant utilizing ozonated water; William D. Hurst, 426/332, 321, 474, 532, 644 [IMAGE AVAILABLE]
63. 4,824,285, Apr. 25, 1989, Apparatus and method for beach reclamation; Joseph C. Trierweiler, 405/17, 15, 16 [IMAGE AVAILABLE]
64. 4,821,936, Apr. 18, 1989, Hydraulic index drive system; Paul V. Osborn, 226/170; 60/487, 489; 226/95, 120, 139 [IMAGE AVAILABLE]
65. 4,802,349, Feb. 7, 1989, Horizontal bed power assist hide applicator; Carleton E. Jennrich, et al., 69/39, 19, 40, 45 [IMAGE AVAILABLE]
66. 4,783,004, Nov. 8, 1988, Ball drive sprinkler; James F. Lockwood, 239/205, 206, 240 [IMAGE AVAILABLE]
67. 4,781,140, Nov. 1, 1988, Apparatus for towing arrays of geophysical devices; Robert R. Bell, et al., 114/244, 245; 367/15 [IMAGE AVAILABLE]
68. 4,776,370, Oct. 11, 1988, Apparatus for securing a cable to a tubular pipe liner; Charles A. Long, Jr., 138/98, 109 [IMAGE AVAILABLE]
69. 4,774,855, Oct. 4, 1988, Apparatus for providing an electrical generator with a constant rotational speed from a variable speed input; Peter W. Murrell, et al., 475/31; 74/411, 720; 475/77 [IMAGE AVAILABLE]
70. 4,756,671, Jul. 12, 1988, Low damage hydraulic fish pumping system; Eldon L. Grimes, deceased, et al., 417/53; 43/4.5; 417/85, 90, 108, 405 [IMAGE AVAILABLE]
71. 4,747,466, May 31, 1988, Impact tool; Bill L. Jaworski, 181/120, 113; 367/83, 146 [IMAGE AVAILABLE]
72. 4,740,311, Apr. 26, 1988, Separating oil phase from aqueous phase using an apertured oleophilic sieve in contact with an apertured cylindrical cage wall; Jan Kruyer, 210/669, 401, 799 [IMAGE AVAILABLE]
73. 4,738,817, Apr. 19, 1988, Method for forming pharmaceutical capsules from hydrophilic polymers; Fritz Wittwer, et al., 264/328.14; 106/138.1, 156.24, 160.1; 524/24 [IMAGE AVAILABLE]
74. 4,738,724, Apr. 19, 1988, Method for forming pharmaceutical capsules from starch compositions; Fritz Wittwer, et al., 106/206.1; 264/328.1, 328.14, 328.15, 328.18 [IMAGE AVAILABLE]
75. 4,738,330, Apr. 19, 1988, Hydraulic drive system for use with vehicle power steering pump; Masahiko Suzuki, et al., 180/421; 60/443, 450; 123/41.12; 137/101, 115.04, 115.09; 180/423; 280/6.157 [IMAGE AVAILABLE]
76. 4,732,682, Mar. 22, 1988, Aeration apparatus and method; Ted R. Rymal, 210/620, 219, 220, 242.2, 629, 758; 261/87, 93, 120, DIG.75 [IMAGE AVAILABLE]
77. 4,726,315, Feb. 23, 1988, Apparatus for towing arrays of geophysical devices; Robert R. Bell, et al., 114/244, 254; 367/15 [IMAGE AVAILABLE]
78. 4,720,898, Jan. 26, 1988, Replacement of split pins in guide tubes; Raymond M. Calfo, et al., 29/33K, 705, 707, 711, 723; 376/260; 976/DIG.118 [IMAGE AVAILABLE]
79. 4,715,111, Dec. 29, 1987, Remote repair system for nuclear fuel rod assemblies; Anoop Kapoor, et al., 29/723, 402.08, 466, 467, 703, 720; 376/258, 262, 271, 463; 414/146, 745.2; 976/DIG.68, DIG.264 [IMAGE AVAILABLE]

AVAILABLE]

80. 4,713,896, Dec. 22, 1987, Inshore submersible amphibious machines; Eric G. Jennens, 37/308, 309, 313; 56/9; 91/51; 114/312, 333, 337; 440/12.63 [IMAGE AVAILABLE]
81. 4,692,064, Sep. 8, 1987, Method to drill and tap a hollow underwater member; Richard N. Wankmuller, 405/211, 195.1, 216 [IMAGE AVAILABLE]
82. 4,687,139, Aug. 18, 1987, Ball drive sprinkler; James F. Lockwood, 239/205, 206, 240 [IMAGE AVAILABLE]
83. 4,685,983, Aug. 11, 1987, Method and apparatus for the installation of a liner within a conduit; Charles A. Long, Jr., 156/64, 156, 287, 294, 361, 423; 264/510; 427/238 [IMAGE AVAILABLE]
84. 4,685,414, Aug. 11, 1987, Coating printed sheets; Mark A. DiRico, 118/46, 211, 262 [IMAGE AVAILABLE]
85. 4,685,375, Aug. 11, 1987, Mix-delivery system for explosives; Cyrus A. Ross, et al., 86/20.15, 20.12; 149/2, 60, 109.6; 264/3.4 [IMAGE AVAILABLE]
86. 4,643,830, Feb. 17, 1987, Process for operating a total barrier oxidation ditch; John.H. Reid, 210/629, 194, 219, 630, 903, 926; 588/205, 244, 246, 248 [IMAGE AVAILABLE]
87. 4,640,552, Feb. 3, 1987, Method and apparatus for splitting ice masses; Ronald D. Page, 299/24; 175/6, 17, 18, 65, 325.2; 405/61, 217 [IMAGE AVAILABLE]
88. 4,639,993, Feb. 3, 1987, Nuclear fuel rod loading fixture for use in a remote repair system; Anoop Kapoor, 29/428, 464, 559, 723; 376/261, 271, 463; 414/146, 745.2; 976/DIG.68, DIG.264 [IMAGE AVAILABLE]
89. 4,631,860, Dec. 30, 1986, Method for pre-germinating seeds; Robert I. Broughton, 47/58.1, DIG.9 [IMAGE AVAILABLE]
90. 4,629,432, Dec. 16, 1986, Elastically supported thruster structure; Arnfinn Dyrkorn, et al., 440/52; 114/151; 181/207; 248/631; 267/113; 440/70 [IMAGE AVAILABLE]
91. 4,621,946, Nov. 11, 1986, Method and apparatus for moving ice masses; Ronald D. Page, 405/61; 114/242; 405/211, 217; 440/33 [IMAGE AVAILABLE]
92. 4,616,719, Oct. 14, 1986, Casing lateral wells; Newton B. Dismukes, 175/94, 107 [IMAGE AVAILABLE]
93. 4,614,146, Sep. 30, 1986, Mix-delivery system for explosives; Cyrus A. Ross, et al., 366/40; 102/313; 149/109.6 [IMAGE AVAILABLE]
94. 4,578,784, Mar. 25, 1986, Tunable marine seismic source; Joseph F. Mifsud, 367/143; 181/110, 120; 367/189 [IMAGE AVAILABLE]
95. 4,577,547, Mar. 25, 1986, Impact tool; Bill L. Jaworski, 91/39, 417R [IMAGE AVAILABLE]
96. 4,535,714, Aug. 20, 1985, Rudder rotor for watercraft and floating equipment; Fred Petersen, 114/162, 144R; 244/10, 206; 416/4 [IMAGE AVAILABLE]
97. 4,526,239, Jul. 2, 1985, Underwater hydraulic tool; Hidehiko Kaneda, et al., 173/73, 69, 168, 171, DIG.1; 451/488 [IMAGE AVAILABLE]

98. 4,511,461, Apr. 16, 1985, Process for recovering minerals and metals by oleophilic adhesion; Jan Kruyer, 209/47, 49, 166, 168, 171, 272, 307; 210/783 [IMAGE AVAILABLE]
99. 4,505,638, Mar. 19, 1985, Underwater **hydraulic motor**; Kenji Sugino, et al., 415/113, 903 [IMAGE AVAILABLE]
100. 4,483,411, Nov. 20, 1984, Tunable marine seismic source; Joseph F. Mifsud, 181/120, 161, 402; 367/23, 143, 152 [IMAGE AVAILABLE]
101. 4,481,800, Nov. 13, 1984, Cold rolling mill for metal strip; Robert C. Ruhl, 72/11.4, 11.7, 13.1, 241.2, 245 [IMAGE AVAILABLE]
102. 4,461,660, Jul. 24, 1984, Bulk manufacture of emulsion explosives; Rejean Binet, et al., 149/2; 86/1.1, 20.1; 149/46, 109.6; 366/57 [IMAGE AVAILABLE]
103. 4,455,232, Jun. 19, 1984, Method and apparatus for induced-flow circulation and pressurized aeration in a barrier oxidation ditch; John H. Reid, 210/628, 194, 220, 629, 926; 261/93, DIG.75 [IMAGE AVAILABLE]
104. 4,422,990, Dec. 27, 1983, Method and apparatus for making soil plugs; Errol C. Armstrong, et al., 264/45.3; 47/74; 264/39, 334, 338; 425/93, 259, 261, 438, 817R [IMAGE AVAILABLE]
105. 4,397,106, Aug. 9, 1983, Dredge bucket wheel structure; Alexander W. K. McDowell, 37/329, 901 [IMAGE AVAILABLE]
106. 4,391,722, Jul. 5, 1983, **Water**-based low foam hydraulic fluid employing 2-ethylhexanol defoamer; Ellen S. Schwartz, et al., 252/73, 74, 75, 76, 77, 78.1; 508/583 [IMAGE AVAILABLE]
107. 4,382,746, May 10, 1983, Vortex turbine apparatus; Philip Retz, 415/202, 90 [IMAGE AVAILABLE]
108. 4,325,394, Apr. 20, 1982, Submersible motor chemical processing apparatus; Donald J. Reams, 134/141, 149, 902; 418/232 [IMAGE AVAILABLE]
109. 4,314,521, Feb. 9, 1982, Method and apparatus in the treatment of underwater surfaces of fixed or floating constructions; Hans G. Lundberg, 114/222; 15/1.7; 134/167R; 219/72; 228/18 [IMAGE AVAILABLE]
110. 4,306,413, Dec. 22, 1981, Hydraulic power and control system; Frederic H. Middleton, 60/478, 484; 91/529; 114/48, 322 [IMAGE AVAILABLE]
111. 4,305,214, Dec. 15, 1981, In-line centrifugal pump; George P. Hurst, 37/331, 195, 334; 415/52.1, 196, 203, 224; 417/205 [IMAGE AVAILABLE]
112. 4,268,398, May 19, 1981, Sludge agitating method; William D. Shuck, et al., 111/101; 210/170, 220, 221.2, 242.2; 261/77, 120, 121.1 [IMAGE AVAILABLE]
113. 4,236,995, Dec. 2, 1980, Process for recovering bitumen from tar sand; Jan Kruyer, 208/391, 425; 209/5, 17 [IMAGE AVAILABLE]
114. 4,199,262, Apr. 22, 1980, Bulk explosive mixing and delivery apparatus; William E. Cribb, et al., 366/44, 51, 184, 336 [IMAGE AVAILABLE]
115. 4,198,167, Apr. 15, 1980, Automatic tempura batter mixer; Douglas O. Deal, et al., 366/152.2, 153.1, 184, 288, 309 [IMAGE AVAILABLE]
116. 4,191,479, Mar. 4, 1980, Sludge agitating apparatus; William D. Shuck, et al., 366/101; 114/264; 261/77, 120, 121.1 [IMAGE AVAILABLE]

117. 4,188,918, Feb. 19, 1980, Internal combustion engine having inducted charge control means driven by engine through variable speed hydraulic transmission; Urban G. Robbins, Jr., 123/25R, 561 [IMAGE AVAILABLE]
118. 4,159,715, Jul. 3, 1979, Liquid treatment apparatus for body care; Philippe G. E. Woog, et al., 601/162 [IMAGE AVAILABLE]
119. 4,158,597, Jun. 19, 1979, Bleaching tower for gas phase bleaching; Bengt E. Pettersson, 162/238; 68/181R; 162/246 [IMAGE AVAILABLE]
120. 4,146,982, Apr. 3, 1979, Improved pump-type sludge dredging apparatus; Makoto Norisugi, 37/310, 326, 334 [IMAGE AVAILABLE]
121. 4,146,020, Mar. 27, 1979, Power handle for hydraulic toothbrush-spray appliance; Michel A. Moret, et al., 601/96; 15/22.1; 601/139, 160, 162 [IMAGE AVAILABLE]
122. 4,144,936, Mar. 20, 1979, Down hole milling or grinding system; Robert F. Evans, 166/298, 55.7, 65.1; 204/212; 205/663 [IMAGE AVAILABLE]
123. 4,134,426, Jan. 16, 1979, Seawater **hydraulic motor** distributing valve based on a hydrosphere bearing; Earl J. Beck, 137/625.23; 251/315.03, 315.16 [IMAGE AVAILABLE]
124. 4,105,494, Aug. 8, 1978, Process of gas-phase bleaching high consistency finely disintegrated pulp; Bengt E. Pettersson, 162/19, 49, 52, 63, 65 [IMAGE AVAILABLE]
125. 4,085,002, Apr. 18, 1978, Bleaching tower for gas phase bleaching; Bengt Edvard Pettersson, 162/238; 68/181R; 162/246 [IMAGE AVAILABLE]
126. 4,047,571, Sep. 13, 1977, Automatic fire extinguishing system for a building having central air conditioning; Guy Chaintrier, et al., 169/60; 62/180; 169/15 [IMAGE AVAILABLE]
127. 4,040,669, Aug. 9, 1977, Self propelled excavating vehicle; Wesley D. Franklin, 299/56, 22, 67 [IMAGE AVAILABLE]
128. 4,033,281, Jul. 5, 1977, Extra heavy duty hydrostatic anchor together with its extra heavy duty tether cable; Roy W. Lundh, 114/295 [IMAGE AVAILABLE]
129. RE 29,265, Jun. 14, 1977, Closed cell foam plastic molding machine; James W. Hendry, 425/147; 264/328.16, DIG.83; 425/561, 817R [IMAGE AVAILABLE]
130. 4,021,344, May 3, 1977, Oil pick up device; Michael Guthrie Webb, 210/122, 242.3, 776, 923 [IMAGE AVAILABLE]
131. 4,018,973, Apr. 19, 1977, Furnace construction for plasma arc remelting of metal; Boris Evgenievich Paton, et al., 373/18, 21 [IMAGE AVAILABLE]
132. 4,008,858, Feb. 22, 1977, Treating device for synthetic resin waste; Masatora Yamada, et al., 241/101.2, 67, 247, 261.1 [IMAGE AVAILABLE]
133. 4,004,642, Jan. 25, 1977, Tround terra-drill processes and apparatus; David Dardick, 175/4.5; 89/26; 175/93, 102, 106, 107 [IMAGE AVAILABLE]
134. 3,992,292, Nov. 16, 1976, Moving belt-type oil skimmer with propulsion induced flow, method and apparatus; Eldon L. Grimes, et al.,



210/671, 242.4, 693 [IMAGE AVAILABLE]

135. 3,987,537, Oct. 26, 1976, Method and apparatus for hydrophone streamer manufacture; Noel Macon Warren, 29/592.1, 241, 407.05, 433, 801; 254/134.3FT, 134.3R [IMAGE AVAILABLE]

136. 3,980,802, Sep. 14, 1976, Method of arc control in plasma arc furnace torches; Boris Evgenievich Paton, et al., 373/18; 219/121.36; 373/21 [IMAGE AVAILABLE]

137. 3,962,387, Jun. 8, 1976, Method of injection molding a foamable thermoplastic material; James W. Hendry, 264/50, 328.14, 349, DIG.5, DIG.83 [IMAGE AVAILABLE]

138. 3,899,033, Aug. 12, 1975, Pneumatic-kinetic drilling system; Allen T. Van Huisen, 175/97, 69, 103, 106, 107, 170 [IMAGE AVAILABLE]

139. 3,885,286, May 27, 1975, STREAMER MANUFACTURE; A. C. Hill, 29/745; 15/104.061; 29/241, 433, 801, 896.2; 367/20 [IMAGE AVAILABLE]

140. 3,882,800, May 13, 1975, Automotive unit for the collection and incineration of household or industrial refuse; Michel G. J. du Chambon, 110/212, 119, 215, 216, 240, 246 [IMAGE AVAILABLE]

141. 3,879,155, Apr. 22, 1975, Closed cell foam plastic molding apparatus; James W. Hendry, 425/4C; 264/50; 425/203, 817C [IMAGE AVAILABLE]

142. 3,877,520, Apr. 15, 1975, SUBSEA COMPLETION AND REWORK SYSTEM FOR DEEP **WATER** OIL WELLS; Paul S. Putnam, 166/366 [IMAGE AVAILABLE]

143. 3,864,858, Feb. 11, 1975, PAVEMENT, CURB AND GUTTER CONCRETE LAYING MACHINE; William P. K. Rochfort, 404/98 [IMAGE AVAILABLE]

144. 3,849,584, Nov. 19, 1974, PLASMA ARC TORCH; Boris Evgenievich Paton, et al., 373/21; 219/121.36; 373/18 [IMAGE AVAILABLE]

145. 3,824,797, Jul. 23, 1974, EVACUATED TUBE **WATER** HAMMER PILE DRIVING; Serge S. Wisotsky, 405/228; 173/1; 175/56; 181/120 [IMAGE AVAILABLE]

146. 3,807,274, Apr. 30, 1974, METHOD FOR LAUNCHING OBJECTS FROM SUBMERSIBLES; Paul Cohen, 89/1.81, 8; 114/238 [IMAGE AVAILABLE]

147. 3,806,291, Apr. 23, 1974, CLOSED CELL FOAM PLASTIC MOLDING MACHINE; James W. Hendrey, 425/147; 264/50, 68; 425/560, 585, 817R [IMAGE AVAILABLE]

148. 3,782,127, Jan. 1, 1974, METHOD AND APPARATUS FOR DEPOSITING FOUNDATIONS UNDER SUBMERGED STRUCTURES; Kaare Ritter Olsen, 405/226, 233 [IMAGE AVAILABLE]

149. 3,776,315, Dec. 4, 1973, PENDULUM LIGHT SENSOR; Raymond E. Gill, et al., 172/4.5; 33/366.24; 37/907; 250/231.1 [IMAGE AVAILABLE]

150. 3,749,505, Jul. 31, 1973, CONCRETE CURB LAYING MACHINE; Charles P. Miller, et al., 404/98 [IMAGE AVAILABLE]

151. 3,710,695, Jan. 16, 1973, CONSTRUCTION MACHINE AND CONTROLS THEREFOR; Charles R. Miller, et al., 404/98; 180/9.46, 434; 404/105 [IMAGE AVAILABLE]

152. 3,704,080, Nov. 28, 1972, FLUID ENGINE; Grosvenor M. Cross, 417/486, 488, 518, 531 [IMAGE AVAILABLE]

153. 3,672,177, Jun. 27, 1972, SUBSEA FOUNDATION UNIT AND METHOD OF INSTALLATION; William F. Manning, 405/227; 175/7, 9 [IMAGE AVAILABLE]

154. 3,609,085, Sep. 28, 1971, POLYESTER FUNCTIONAL FLUID COMPOSITIONS; Frank H. Langenfeld, 252/79, 76, 389.2; 508/485, 492, 493 [IMAGE AVAILABLE]

155. 3,604,139, Sep. 14, 1971, APPARATUS FOR SEINE PURSING AND METHOD FOR PURSING A SEINE THEREBY; Paul Strom, et al., 43/4.5, 8, 14 [IMAGE AVAILABLE]

LITIGATION SEARCH FOR LINDA SHOLL: US 5,908,057 (reissue 09/867,320)

Files searched in QUESTEL ORBIT:

Selected cluster : LEGAL

Databases : LGST, CRXX, PAST, LITA

?us5908057/pn

Term not in index/PN-CRXX : US5908057

Term not in index/PN-PAST : US5908057

Term not in index/PN-LITA : US5908057

LGST	1
CRXX	0
PAST	0
LITA	0

1/1 LGST (1/1) - (C) LEGSTAT

PN - US 5908057 [US5908057]

AP - US 21617/98 19980210 [1998US-0021617]

DT - US-P

ACT - 19980210 US/AE-A

APPLICATION DATA (PATENT)

{US 21617/98 19980210 [1998US-0021617]}

- 19990601 US/A

PATENT

UP - 1999-27

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Files searched in LEXIS and NEXIS:

All patent files

PATNO IS 5908057

Your search request has found 1 PATENT through Level 1.

LEVEL 1 - 1 OF 1 PATENT

<5,908,057>

<=> GET 1st DRAWING SHEET OF 11

Jun. 1, 1999

Fluid powered bubble machine with spill-proof capability

CORE TERMS: bubble, impeller, container, fluid, housing, axle, cavity, cylinder, hollow, machine...

>>>

File searched: CASES

Your search request has found no CASES.

File searched: JOURNALS

Your search request has found no ITEMS.

File searched: NEWS STORIES

Your search request has found no STORIES.

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File searched in DIALOG:

File 345:Inpadoc/Fam.& Legal Stat 1968-2001/UD=200130

(c) 2001 EPO

S1 1 PN="US 5908057"

1/39/1

DIALOG(R)File 345:Inpadoc/Fam.& Legal Stat

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13843832

Basic Patent (No,Kind,Date): US 5246046 A 19930921 <No. of Patents: 007>

Patent Family:

Patent No	Kind	Date	Applic No	Kind	Date	
AU 9654206	A1	19970916	AU 9654206	A	19960229	
US 5246046	A	19930921	US 828345	A	19920130	(BASIC)
US 5495876	A	19960305	US 86541	A	19930701	
US 5832969	A	19981110	US 608854	A	19960229	
US 5908057	A	19990601	US 21617	A	19980210	
US RE36131	E	19990309	US 531768	A	19950921	
WO 9731690	A1	19970904	WO 96US3192	A	19960229	

Priority Data (No,Kind,Date):

WO 96US3192 W 19960229  
US 828345 A 19920130  
US 86541 A 19930701  
US 828345 A1 19920130  
US 608854 A 19960229  
US 86541 A2 19930701  
US 828345 A2 19920130  
US 21617 A 19980210  
US 608854 A1 19960229  
US 531768 A 19950921  
US 828345 A5 19920130  
WO 96US3192 A 19960229

PATENT FAMILY:

AUSTRALIA (AU)

Patent (No,Kind,Date): AU 9654206 A1 19970916  
SPILL-PROOF BUBBLE MACHINE (English)  
Patent Assignee: MICHAEL R SCHRAMM  
Author (Inventor): SCHRAMM MICHAEL R  
Priority (No,Kind,Date): WO 96US3192 W 19960229  
Applic (No,Kind,Date): AU 9654206 A 19960229  
IPC: \* A63H-033/28  
Derwent WPI Acc No: \* G 96-150367  
Language of Document: English

UNITED STATES OF AMERICA (US)

Patent (No,Kind,Date): US 5246046 A 19930921  
SPILL-RESISTANT BUBBLE SOLUTION CONTAINER (English)

Patent Assignee: SCHRAMM MICHAEL R (US)  
 Author (Inventor): SCHRAMM MICHAEL R (US)  
 Priority (No,Kind,Date): US 828345 A 19920130  
 Applic (No,Kind,Date): US 828345 A 19920130  
 National Class: \* 141098000; 141311000A; 141333000; 141339000;  
 446020000; 220719000  
 IPC: \* B65B-001/04; B65B-003/04  
 Derwent WPI Acc No: ; G 93-311271  
 Language of Document: English  
 Patent (No,Kind,Date): US 5495876 A 19960305  
 SPILL-PROOF BUBBLE MACHINE (English)  
 Patent Assignee: SCHRAMM MICHAEL R (US)  
 Author (Inventor): SCHRAMM MICHAEL R (US)  
 Priority (No,Kind,Date): US 86541 A 19930701; US 828345 A1  
 19920130; WO 96US3192 W 19960229  
 Applic (No,Kind,Date): US 86541 A 19930701  
 Addnl Info: 5246046 Patented  
 National Class: \* 141098000; 141339000; 446020000  
 IPC: \* B65B-001/04; B65B-003/04  
 Derwent WPI Acc No: \* G 96-150367; G 96-150367  
 Language of Document: English  
 Patent (No,Kind,Date): US 5832969 A 19981110  
 FLUID POWERED BUBBLE MACHINE WITH SPILL-PROOF CAPABILITY (English)  
 Patent Assignee: SCHRAMM MICHAEL R (US)  
 Author (Inventor): SCHRAMM MICHAEL R (US)  
 Priority (No,Kind,Date): US 608854 A 19960229; US 86541 A2  
 19930701; US 828345 A2 19920130  
 Applic (No,Kind,Date): US 608854 A 19960229  
 Addnl Info: 5495876 19960305 Patented; 5246046 19930921 Patented  
 National Class: \* 141098000; 141339000; 141311000A; 446020000  
 IPC: \* B65B-001/04  
 Derwent WPI Acc No: ; G 99-008214  
 Language of Document: English  
 Patent (No,Kind,Date): US 5908057 A 19990601  
 FLUID POWERED BUBBLE MACHINE WITH SPILL-PROOF CAPABILITY (English)  
 Patent Assignee: SCHRAMM MICHAEL R (US)  
 Author (Inventor): SCHRAMM MICHAEL R (US)  
 Priority (No,Kind,Date): US 21617 A 19980210; US 608854 A1  
 19960229; US 86541 A2 19930701; US 828345 A2 19920130  
 Applic (No,Kind,Date): US 21617 A 19980210  
 Addnl Info: 5495876 19960305 Patented; 5246046 19930921 Patented  
 National Class: \* 141098000; 141339000; 141311000A; 446020000  
 IPC: \* B65B-001/04  
 Derwent WPI Acc No: \* G 93-311271; G 96-150367; G 99-008214; G  
 99-346798; G 99-346798  
 Language of Document: English  
 Patent (No,Kind,Date): US RE36131 E 19990309  
 SPILL-RESISTANT BUBBLE SOLUTION CONTAINER (English)  
 Patent Assignee: SCHRAMM MICHAEL R (US)  
 Author (Inventor): SCHRAMM MICHAEL R (US)  
 Priority (No,Kind,Date): US 531768 A 19950921; US 828345 A5  
 19920130  
 Applic (No,Kind,Date): US 531768 A 19950921  
 Addnl Info: 5246046 19930921 Reissue of  
 National Class: \* 141098000; 141311000A; 141333000; 141339000;  
 446020000; 220719000  
 IPC: \* B65B-001/04; B65B-003/04

Derwent WPI Acc No: \* G 93-311271; G 96-150367; G 99-008214; G  
99-346798

Language of Document: English

UNITED STATES OF AMERICA (US)

Legal Status (No, Type, Date, Code, Text):

US 36131	E	19920130	US AA	PRIORITY
			US 828345 A5	19920130
US 36131	E	19950921	US AE	APPLICATION DATA (PATENT)
			(APPL. DATA (PATENT))	
			US 531768 A	19950921
US 36131	E	19990309	US E	REISSUE
US 5246046	P	19920130	US AE	APPLICATION DATA (PATENT)
			(APPL. DATA (PATENT))	
			US 828345 A	19920130
US 5246046	P	19930921	US A	PATENT
US 5246046	P	19960521	US RF	REISSUE APPLICATION FILED
			(REISSUE APPL. FILED)	
			950921	
US 5495876	P	19920130	US AA	PRIORITY
			US 828345 A1	19920130
US 5495876	P	19930701	US AE	APPLICATION DATA (PATENT)
			(APPL. DATA (PATENT))	
			US 86541 A	19930701
US 5495876	P	19960229	US AA	PCT-APPLICATION (PCT-APPL.)
			WO 96US3192 W	19960229
US 5495876	P	19960305	US A	PATENT
US 5832969	P	19920130	US AA	PRIORITY
			US 828345 A2	19920130
US 5832969	P	19930701	US AA	PRIORITY
			US 86541 A2	19930701
US 5832969	P	19960229	US AE	APPLICATION DATA (PATENT)
			(APPL. DATA (PATENT))	
			US 608854 A	19960229
US 5832969	P	19981110	US A	PATENT
US 5908057	P	19920130	US AA	PRIORITY
			US 828345 A2	19920130
US 5908057	P	19930701	US AA	PRIORITY
			US 86541 A2	19930701
US 5908057	P	19960229	US AA	PRIORITY
			US 608854 A1	19960229
US 5908057	P	19980210	US AE	APPLICATION DATA (PATENT)
			(APPL. DATA (PATENT))	
			US 21617 A	19980210
US 5908057	P	19990601	US A	PATENT

WORLD INTELLECTUAL PROPERTY ORGANIZATION, PCT (WO)

Patent (No, Kind, Date): WO 9731690 A1 19970904

SPILL-PROOF BUBBLE MACHINE (English)

Patent Assignee: SCHRAMM MICHAEL R (US)

Author (Inventor): SCHRAMM MICHAEL R (US)

Priority (No, Kind, Date): WO 96US3192 A 19960229; US 86541 A  
19930701; US 828345 A 19920130

Applic (No, Kind, Date): WO 96US3192 A 19960229

Designated States: (National) AL; AM; AT; AU; BB; BG; BR; BY; CA; CH;  
CN; CZ; DE; DK; EE; ES; FI; GB; GE; HU; IS; JP; KE; KG; KP; KR; KZ;

LK; LR; LS; LT; LU; LV; MD; MG; MK; MN; MW; MX; NO; NZ; PL; PT; RO;  
RU; SD; SE; SG; SI; SK; TJ; TM; TR; TT; UA; UG; UZ; VN (Regional)  
AT; BE; CH; DE; DK; ES; FR; GB; GR; IE; IT; LU; MC; NL; PT; SE  
Filing Details: WO 100000 With international search report  
IPC: \* A63H-033/28  
Language of Document: English

WORLD INTELLECTUAL PROPERTY ORGANIZATION, PCT (WO)

Legal Status (No, Type, Date, Code, Text):

WO 9731690	P	19920130	WO AA	PRIORITY (PATENT)
			US 828345 A	19920130
WO 9731690	P	19930701	WO AA	PRIORITY (PATENT)
			US 86541 A	19930701
WO 9731690	P	19960229	WO AE	APPLICATION DATA (APPL. DATA)
			WO 96US3192 A	19960229
WO 9731690	P	19970904	WO AK	DESIGNATED STATES CITED IN A PUBLISHED APPLICATION WITH SEARCH REPORT (DESIGNATED STATES CITED IN A PUBLISHED APPL. WITH SEARCH REPORT)
			AL AM AT AU BB BG BR BY CA CH CN CZ DE DK EE ES FI GB GE HU IS JP KE KG KP KR KZ LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK TJ TM TR TT UA UG UZ VN	
WO 9731690	P	19970904	WO AL	DESIGNATED COUNTRIES FOR REGIONAL PATENTS CITED IN A PUBLISHED APPLICATION WITH SEARCH REPORT (DESIGNATED COUNTRIES FOR REGIONAL PATENTS CITED IN A PUBLISHED APPL. WITH SEARCH REPORT)
			AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE	
WO 9731690	P	19970904	WO A1	PUBLICATION OF THE INTERNATIONAL APPLICATION WITH THE INTERNATIONAL SEARCH REPORT (PUB. OF THE INTERNATIONAL APPL. WITH THE INTERNATIONAL SEARCH REPORT)
WO 9731690	P	19971126	WO 121	EP: PCT APP. ART. 158 (1) (EP: PCT ANM. ART. 158 (1))
WO 9731690	P	19980702	DE 8642/REG	WITHDRAWAL (ZURUECKNAHME)
WO 9731690	P	19980904	WO NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:
			JP 97530903	
WO 9731690	P	19981029	WO NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:
			CA	
WO 9731690	P	19991013	WO 122	EP: PCT APP. NOT ENT. EUROP. PHASE (EP: PCT ANM. NICHT IN EUROP. PHASE EING.)

END LITIGATION SEARCH US 5,908,057

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